

**Field      Engineering and Technology**

**Review and expiry of *Civil Engineering, Civil Plant Operation and Management, Civil Works and Services, Engineering, and Highway Construction and Maintenance* unit standards**

Subfield	Domain	ID
Civil Engineering	Civil Engineering - Generic	11417, 11422
Civil Plant Operation and Management	Civil Plant Management	6438-6440, 6464
	Civil Plant Operation	6468, 22269-22273
Civil Works and Services	Civil Construction Supervision	12564, 17320, 22292
	Civil Construction Works	6471, 6480, 6484, 20482, 23279-23281, 23286
	Civil Project Management	12566
Engineering	Generic Engineering	11409, 11413, 12634
Highway Construction and Maintenance	Road Construction	12572, 17330
	Roading Maintenance	11305, 11315, 11321
	Temporary Traffic Management	5629, 5631

Connexis Infrastructure ITO has completed the review of the unit standards listed above.

**Date new versions published**

**January 2019**

**Summary**

The unit standards were identified as overdue for review. Usage checks showed that most of the standards had received little or no use in the last 3 years and are not included in any current Connexis programmes or required for future use. A list of standards was circulated among relevant industry stakeholders in October 2018, and any standards identified as no longer needed were reviewed with the intention to expire them from the Directory of Assessment Standards.

**Main changes**

- All standards were designated expiring and reissued as new versions with an expiry date included.
- References in guidance information and within individual standards were updated.
- Standard setting body information and contact details were updated.

**Category D unit standards will expire at the end of December 2020**

**Detailed list of unit standards – classification, title, level, and credits**

Key to review category	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</b>	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced

Engineering and Technology > Civil Engineering > Civil Engineering - Generic

ID	Title	Level	Credit	Review Category
11417	Establish characteristics of soils for engineering purposes	4	9	D

ID	Title	Level	Credit	Review Category
11422	Describe engineering solutions for mitigating the effects of natural hazards	5	7	D

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Management

ID	Title	Level	Credit	Review Category
6438	Prepare civil plant, equipment, and vehicle replacement schedule and recommendation	5	10	D
6439	Prepare and implement civil plant, equipment, and vehicle maintenance schedule	5	8	D
6440	Assess the utilisation and productivity of civil plant, equipment, and vehicles	5	10	D
6464	Manage civil plant and equipment	4	8	D

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Operation

ID	Title	Level	Credit	Review Category
6468	Operate a mechanical rockbreaker	3	10	D
22269	Demonstrate knowledge of wheeled loaders in civil construction	3	3	D
22270	Demonstrate knowledge of graders and scrapers in civil construction	3	3	D
22271	Demonstrate knowledge of self-propelled rollers in civil construction	3	3	D
22272	Demonstrate knowledge of bulldozers in civil construction	3	3	D
22273	Demonstrate knowledge of operating articulated dump trucks in civil construction	3	3	D

Engineering and Technology > Civil Works and Services > Civil Construction Supervision

ID	Title	Level	Credit	Review Category
12564	Supervise earthworks preparation for civil construction	4	8	D
17320	Supervise civil construction earthworks	4	15	D
22292	Demonstrate knowledge of field sampling for testing of civil construction materials	4	10	D

Engineering and Technology > Civil Works and Services > Civil Construction Works

ID	Title	Level	Credit	Review Category
6471	Dismantle decommissioned services for civil construction	2	2	D
6480	Assist with survey and set-out on civil construction works	1	3	D
6484	Install gabion baskets for civil construction works	3	8	D
20482	Supervise a horizontal directional drilling operation	4	25	D
23279	Demonstrate knowledge of excavation for infrastructure pipelaying	3	5	D
23280	Establish line, level, and grade for infrastructure pipelaying	3	5	D
23281	Use and care for hand-held power tools used in civil construction	3	4	D
23286	Operate a well-point system for civil construction	3	6	D

Engineering and Technology > Civil Works and Services > Civil Project Management

ID	Title	Level	Credit	Review Category
12566	Demonstrate knowledge of the Resource Management Act 1991 for civil construction activities	5	25	D

Engineering and Technology > Engineering > Generic Engineering

ID	Title	Level	Credit	Review Category
11409	Complete tender analysis and engage a contractor	6	2	D
11413	Produce a design from a supplied design concept	6	15	D
12634	Identify and apply ethical responsibilities relating to professional engineering practice	5	4	D

Engineering and Technology > Highway Construction and Maintenance > Road Construction

ID	Title	Level	Credit	Review Category
12572	Supervise the construction of road pavement layers	2	30	D
17330	Demonstrate knowledge of the set-out and maintenance of road drainage systems	3	5	D

Engineering and Technology > Highway Construction and Maintenance > Roading Maintenance

ID	Title	Level	Credit	Review Category
11305	Adjust the height of surface boxes for roading maintenance	2	3	D
11315	Maintain road reserve by removing detritus and litter	2	3	D
11321	Plan and supervise road maintenance contracts	5	15	D

Engineering and Technology > Highway Construction and Maintenance > Temporary Traffic Management

ID	Title	Level	Credit	Review Category
5629	Assist with temporary traffic management site closure for Level 2 and 3 roads	2	2	D
5631	Plan and install portable traffic signal systems for temporary traffic management	5	3	D